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(54) **Process for preparing linear monofunctional and telechelic difunctional polymers and compositions obtained thereby.**

(57) This invention relates to a process for preparation of non-crosslinked linear monofunctional and telechelic difunctional unsaturated polymers wherein the functional groups are reactive terminal groups other than vinyl groups. The average functionality number of the monofunctional unsaturated polymers is at least 0.7, as determined by nuclear magnetic resonance spectroscopy (NMR). The average functionality number of the telechelic difunctional polymers is at least 1.6-1.7, as determined by NMR. Monofunctional olefins and difunctional olefins are reacted with cyclic olefins or unsaturated polymers to prepare difunctional polymers. The process is substantially free of side reactions comprising double bond migration and cyclization. The unsaturated functional polymers can be reacted in condensation, addition and transesterification reactions to prepare polyesters, graft copolymers, polyurethanes, polyureas, polyamides, thermoplastic and thermosetting resins, block copolymers, ion exchange resins, adhesives, films, fibers, foams and flocculants.

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# EUROPEAN SEARCH REPORT

Application Number  
EP 94 30 3811

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. CL.5)
A	EP-A-0 173 473 (BRITISH PETROLEUM CO PLC) 5 March 1986 * page 12, line 27 - line 28; claim 1 *		C08G61/08
A	EUROPEAN POLYMER JOURNAL, vol. 25, no. 7/8, 1989 OXFORD GB, pages 805-811, H.T.HO ET ALL. 'METATHESIS POLYMERIZATION OF SUBSTITUTED NORBORNENES: MICROSTRUCTURE OF THE POLYMERS OF SOME ESTER DERIVATIVES' * page 806; table 2 *		
A	MACROMOLECULES, vol. 20, 1987 EASTON US, pages 778-782, P.A.PATTON ET ALL. 'FACTORS INFLUENCING THE RATE OF TUNGSTEN HEXACHLORIDE/TETRAMETHYLTIN-CATALYSED OLEFIN METHATHESIS POLYMERIZATION: MONOMER RING STRAIN IS NOT IMPORTANT' * page 1, paragraph 1 *		
			TECHNICAL FIELDS SEARCHED (Int. CL.5)
			C08G C08F
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 25 July 1995	Examiner Stienon, P
<p>CATEGORY OF CITED DOCUMENTS</p> <p>X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document</p> <p>I : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons A : member of the same patent family, corresponding document</p>			

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